PAINFUL POINTS IN GOUTY COMPARED WITH RHEUMATIC ARTHRITIS.¹

By W. H. THOMSON, M.D., LL.D.,

PROFESSOR OF PRACTICE OF MEDICINE IN THE NEW YORK UNIVERSITY.

THE differential diagnosis between acute gout and acute rheumatism is usually simple enough in typical cases, especially when of recent origin. In many chronic cases, however, particularly when gouty arthritis has become general, the differentiation may not be so easy, and in practice we frequently find gouty cases treated for rheumatism or rheumatic patients dosed with colchicum.

For a number of years I have been accustomed to point out that a careful manipulation, of the inflamed joints in these affections will show specific contrasts between them in the localization of the greatest tenderness on pressure. I supposed that this clinical fact had been noted before, but, not finding any reference to it in the works which I have been able to consult, I take this occasion to present the following observations on cases of gout and of rheumatism occurring in my service at the Roosevelt and the Bellevue Hospitals, of New York, during the past few months, with some cases of gout in private practice.

GOUT. Whole number of cases of gout, 34: males, 27; females, 7. The first attack in the history of the patients began in the lower extremities in 31, or 98.9 per cent. In two chronic cases the patients were uncertain where it first began. In one, a painter by trade, and affected with chronic plumbism, the first attack involved the left shoulder as well as his feet.

The first attack was monoarticular in 73 per cent., and polyarticular in 27 per cent. I am inclined to think, however, that the percentage of monoarticular first attacks was higher, particularly in the hospital patients, for the memory of some of the more chronic cases on this point was rather indefinite.

The pulse was noted as of high tension in 98 per cent., and not of high tension in 2 per cent. The arteries were found thickened in 44 per cent., and not thickened in 56 per cent.

Tophi were present in the ears in 12 cases, or 35.1 per cent.

As to painful points: There were 38 instances of inflammation of the knees. In every one of these cases, without exception, the points of greatest tenderness on pressure were on the condyles. The more acute the inflammation, the more distinctly is this tenderness pronounced. In the decline of the inflammation tenderness will persist there when it cannot be elicited elsewhere. This is in marked contrast with acute

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rheumatism, in which, as we shall see, increased tenderness on the condyles, as compared with the other parts of the joint, was not once found.

Of 23 cases of inflammation of the ankles, the points of greatest tenderness were found on the malleoli in 11, just below the malleoli in 10, and on the astragalus in 2.

On the great toe no uniformity in points of greatest tenderness was made out.

The hip-joint was affected in two cases, but without any localized tenderness to pressure in either.

In the upper extremity, among the numerous phalangeal finger-joints affected, and in many instances distorted with gouty deposits, those of them which were painful enough to give indications showed, without exception, the points of greatest tenderness on the condyles—that is, on transverse pressure; while pressure between the dorsal and palmar surfaces did not occasion pain, or very slight pain, compared with pressure on the condyles. I have found this in private practice a valuable sign, in women especially, as these joints are frequently in them the only ones involved in gouty inflammation.

The elbows were affected in 12 cases. Of these the most tender points were on the condyles in 6, on the olecranon in 4, and on both the condyles and the olecranon in 2.

The shoulders were involved in 5 patients. In 2 of them both shoulders were attacked. No particular point of tenderness was noted except in 1, and that was on the acromion.

The cases of inflammation of the metacarpo-phalangeal joints were not enumerated, because their lateral tender points cannot be isolated. The same applies to the wrists, but in both cases of these joints there is more tenderness to lateral pressure than in rheumatism.

RHEUMATISM. Number of cases of rheumatism observed, 49. All of them hospital patients. Males, 32; females, 17.

Among these the heart was or had been affected in 18, or 36.7 per cent. Tonsillitis occurred shortly before or during the attacks in 11, or 22.4 per cent. Pleurisy occurred in 3 cases, or 6 per cent.

The pulse is reported as of low tension, or compressible, in 42, or 85.7 per cent.; of high tension in 5, or 1.02 per cent.; and in 2 not stated.

The first attack was polyarticular in 46, or 94 per cent.; monoarticular in 3, or 6 per cent.

In rheumatism, particularly when a joint is acutely inflamed, there is usually more superficial or cutaneous tenderness than in gout. This may mislead as to the existence of special points of tenderness unless the examination be made with special reference to this subject, when in the great majority of instances, notably in some joints, rheumatism will be found to be scarcely less specific than gout in the localities of greatest pain on pressure, and, what is equally important, that these are in only a few

joints the same as in gout. Thus, in the knee, the typical points of tenderness are on the tendon of the quadriceps just above the patella, and below it also at the tendon insertion. Posteriorly equally characteristic points of tenderness are found along the tendons of the hamstring muscles. Out of 58 cases of inflamed knees in my list, 53, or 91.4 per cent., were thus typical, and in 5, or 8.6 per cent., the pain was uniformly diffused over the joint. In no case were the condyles the seat of most tenderness.

Rheumatic inflammation of the ankles is not so distinctive in the location of painful points as in the case of the knees. Of 32 cases my notes are that the most pain was elicited by pressure on the tendons of the dorsal aspect of the joint in 20, or 64.4 per cent. This pain, however, is not so pronounced as in the tendons of the quadriceps and hamstring muscles of the knees. In 3 cases, or 10.6 per cent., the most painful points were under the malleoli; and in 8, or 25 per cent., there was no specialized place.

The hips were affected four times, but no localized pain was noted in either.

Of the joints of the upper extremity, the shoulders were affected in 20 cases. In only one of these was a special tender point found on the coracoid process.

The elbow was affected in 13 cases. Of these in 9, or 70 per cent., the most painful point was elicited by pressure on the triceps tendon. In 4, or 30 per cent., there were no special points.

The wrists were affected in 24 cases. Of these the most pain was elicited by pressure on the tendons of the dorsal and palmar aspects in 20, or 83.3 per cent. It was uniformly diffused in 3, or 15 per cent.; and one case complained of most pain on transverse pressure, as in gout.

In every case noted of inflammation of the finger-joints in the rheumatic patients the pain was localized in the tendons and not on the condyles.

Why the hips and shoulders do not commonly show specially painful points may be due to these joints being so covered by large muscles.

It seems natural to infer that the difference between these two forms of arthritis in the respects noted, of pain on pressure, is because gout chiefly affects the periosteal, while rheumatism chiefly attacks the synovial structures.

With the exception of the hips and shoulders, therefore, it would seem that the distribution of pain on pressure may be often of use in the discrimination of these two articular inflammations. The ankles and wrists also do not present such marked contrasts as the more simple joints, apparently from the greater number of bones entering into the formation of these articulations.